

Gerotor Motors

High Speed, Low Torque Series

AMGG2 Series

ANFIELD Gerotor Motor Catalog AMGG2 Rev. - (12-23-2025)



Strength in Products,
Strength in Service

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FEATURES

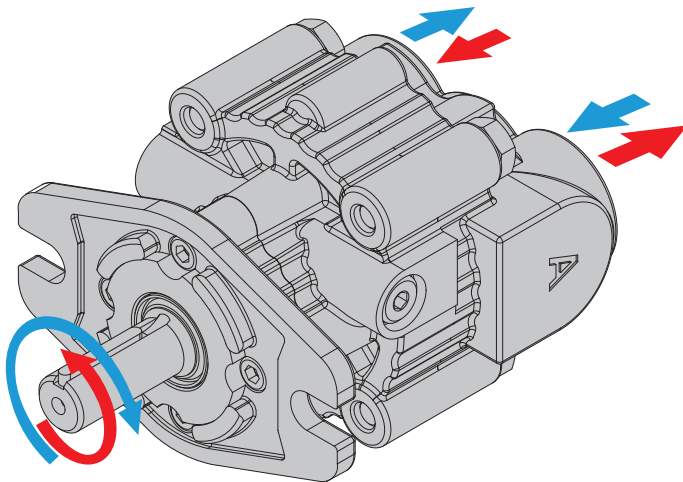
- Gerotor design (High Speed/Low Torque)
- Aluminum construction for optimum power to weight ratio
- Bi-directional
- High pressure mechanical seals available for series application to 1000 PSI back pressure
- Needle roller bearings for long life
- Buna-N Seals are standard for petroleum and glycol based fluids.
"Viton" seals are optional.
- Available in side ports, rear ports
- Straight and splined shafts

MARKETS

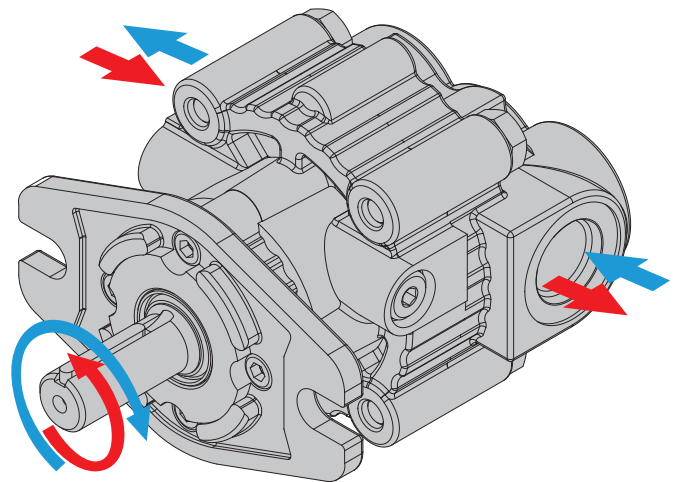
- Agriculture Machinery
- Construction Equipment
- Forestry Equipment
- Material Handling Equipment
- Turf Equipment
- Vocational & Municipal Equipment
- Refuse & dump truck
- Industrial machines
- Aerial

TYPICAL APPLICATIONS

- Saw motor
- Fan motor
- Sprayer motor
- Screed vibration motor



**Rear Ported
AMGG2 motor**



**Side Ported
AMGG2 motor**

PERFORMANCE DATA - AMGG2 SERIES

Pump Model	Displacement/Revolution (Theoretical)					Maximum Continuous Pressure		Maximum Speed
	US gallons	Cubic in	Liters	Cubic cm	Imperial gallons	Δ psi	Δ bar	rpm
AMGG2-0010	.0010	.218	.0039	3.572	.0008	2000	138	5000
AMGG2-0016	.0016	.372	.0062	6.096	.0013	2000	138	5000
AMGG2-0020	.0020	.450	.0078	7.374	.0016	2000	138	5000
AMGG2-0025	.0025	.580	.0097	9.505	.0021	2000	138	5000
AMGG2-0030	.0030	.700	.0116	11.471	.0025	1500	104	5000

When used in series circuits, back pressure is not to exceed 1000 psi (69.0 bar).

TECHNICAL SPECIFICATIONS - AMGG2 SERIES

		1	2	3	4	5
		AMGG2 0010	0016	0020	0025	0030
Displacement Per Revolution	in³/r	0.218	0.372	0.450	0.580	0.700
	cm³/r	3.57	6.094	7.374	9.50	11.471
Maximum Rated RPM	rpm	5000	5000	5000	5000	5000
Rated Flow per 1000 rpm (Nominal)	gpm	0.95	1.61	1.95	2.51	3.03
	l/min	3.6	6.1	7.4	9.5	11.5
Maximum Rated Pressure	Δ psi	Cont.	2000	2000	2000	1500
			138	138	138	103.5
	Δ bar	Inter.	2500	2500	2500	2000
			172.5	172.5	172.5	138
Output Torque Per 1000 PSI (69 bar)*	in-lbs	35	59	72	92	111
	kg-cm	40	68	83	107	128
Shaft Side Load**	lbs	170	130	110	70	30
	kg	77	59	50	31.7	13.5
Weight	lbs	2.8	3.0	3.1	3.3	3.5
	kg	1.25	1.36	1.41	1.50	13.5

* Theoretical

** Side Load: Maximum permissible shaft side load at 2500 rpm and 1000 psi (69 bar) (B-10 bearing life of 1000 hrs.)

Oil Temperature: Maximum recommended oil temperature 180° F (82.2° C)

Oil Viscosity: Recommended viscosity 150 SUS (3.65 engler) (32 centistokes)
Minimum recommended viscosity 60 SUS (2.1 engler) (13 centistokes)

Filtration: Minimum recommended fluid filtration of 10 microns

End Thrust: 80 lbs (36.3 kg) maximum

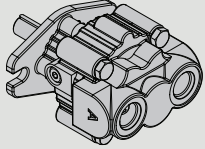
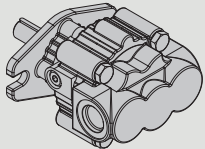
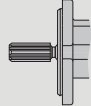
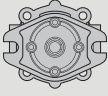
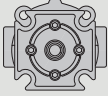
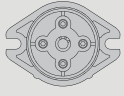


WARNING

Never exceed the INTERMITTENT pressure rating or 5000 RPM

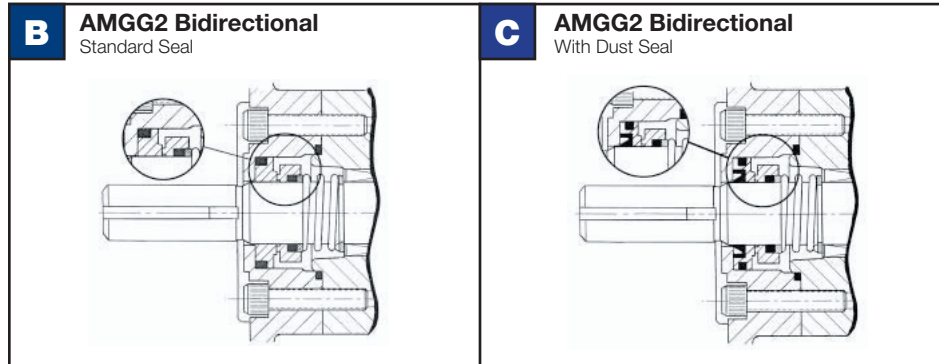
AMGG2 DESIGNATION & ORDERING CODE

AMGG2 0016 B A 1 A 3 ...

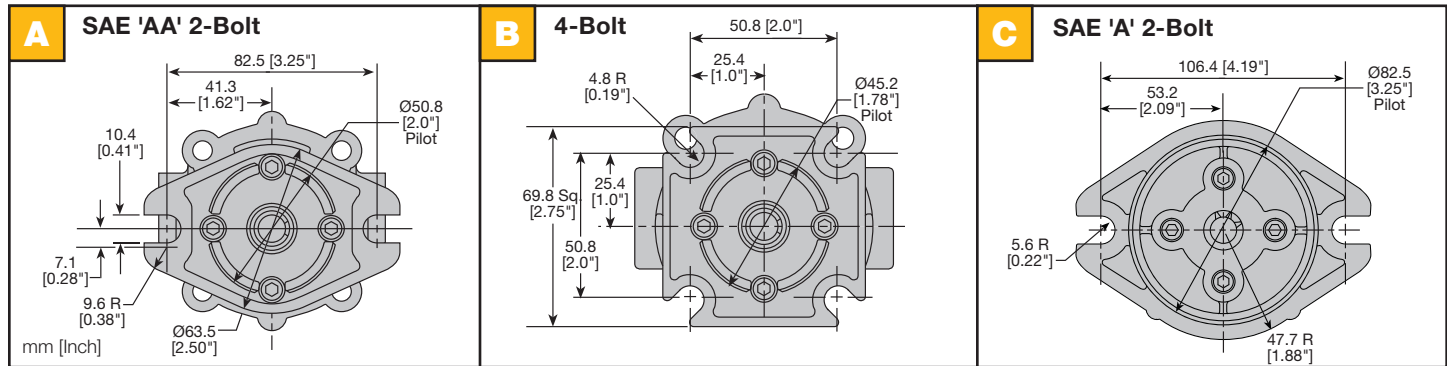
1	2	3	4	5	6	7	8	9																		
1 Series			9 Options																							
AM Anfield Motors			Omit Buna-N Seals (<i>Anfield Standard</i>) V Viton® Seals																							
2 Model			8 Rotation																							
GG2 Gerotor Motor			3 Bidirectional Standard Rotation: Pressurize A for CW																							
3 Section Size			7 Ports																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>cm³/rev</th> <th>in³/rev</th> </tr> </thead> <tbody> <tr> <td>0010</td> <td>3.57</td> <td>0.218</td> </tr> <tr> <td>0016</td> <td>6.094</td> <td>0.372</td> </tr> <tr> <td>0020</td> <td>7.374</td> <td>0.450</td> </tr> <tr> <td>0025</td> <td>9.50</td> <td>0.580</td> </tr> <tr> <td>0030</td> <td>11.471</td> <td>0.700</td> </tr> </tbody> </table>				cm³/rev	in³/rev	0010	3.57	0.218	0016	6.094	0.372	0020	7.374	0.450	0025	9.50	0.580	0030	11.471	0.700	A Rear  B Side 					
	cm³/rev	in³/rev																								
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4 Design			6 Shaft																							
B Standard Seal C Standard Seal w/ dust seal			1 9/16" Dia. Keyed Shaft  2 9/16" Dia. 8 Tooth Spline Long Shaft  6 5/8" Dia. 9 Tooth Spline Shaft  7 7/16" Dia. Keyed Shaft  8 9/16" Dia. 8 Tooth Spline Shaft 																							
5 Flange																										
A SAE 'AA' 2-Bolt Pilot Dia: 2" (50.8 x 3.1 mm) Bolt Circle Dia: 3.25" (82.5 mm)  B 4-Bolt Pilot Dia: 1.78" (45.2 x 3.1 mm) Bolt Centers on 2" x 2" (50.8 x 50.8 mm)  C SAE 'A' 2-Bolt Pilot Dia: 3.25" (82.5 x 3.1 mm) Bolt Circle Dia: 4.19" (106.4 mm) 																										

DESIGNS, SHAFTS & MOUNTING FLANGES

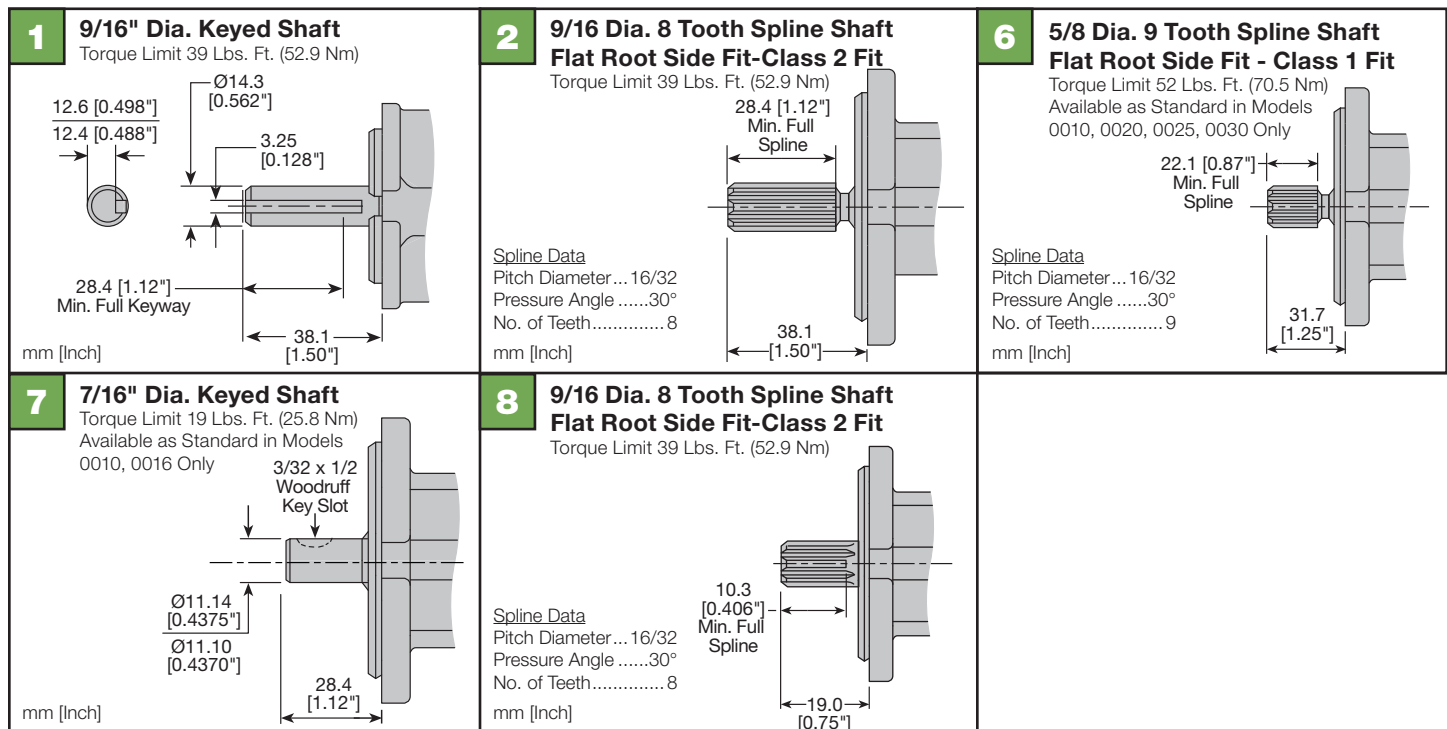
Designs Available



Mounting Flanges Available



Shafts Available *(Consult Anfield for shaft models not listed)*



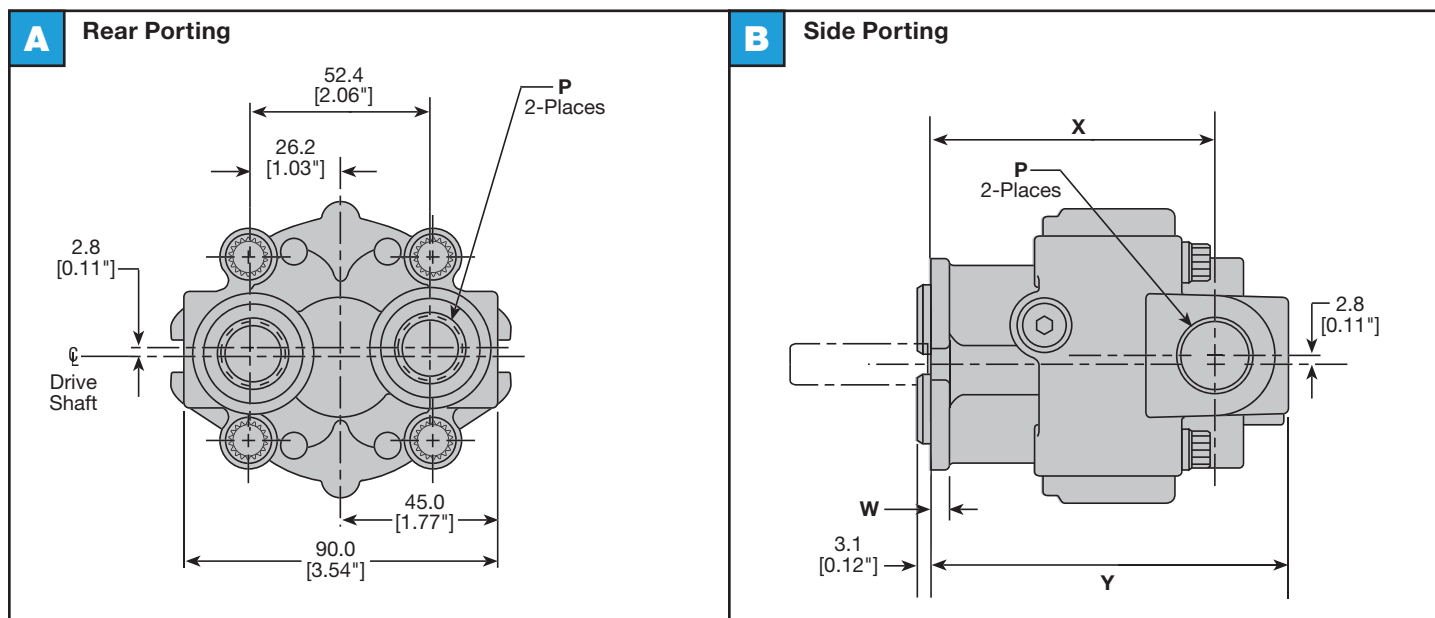
DIMENSION DATA - AMGG2 SERIES

Model No.	Dimensions in (mm)	
	X	Y
AMGG2-0010	2.88 (73.1)	3.67 (93.1)
AMGG2-0016	3.04 (77.3)	3.83 (97.3)
AMGG2-0020	3.13 (79.4)	3.91 (99.4)
AMGG2-0025	3.27 (83.0)	4.06 (103.0)
AMGG2-0030	3.40 (86.3)	4.19 (106.3)

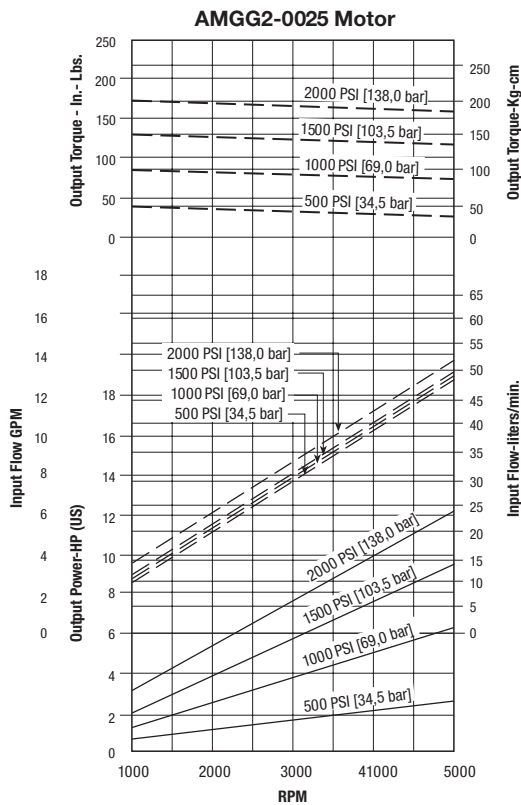
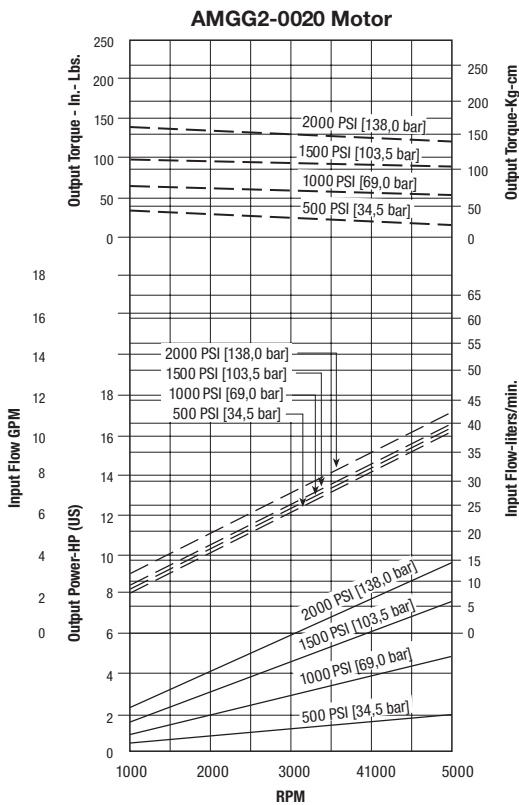
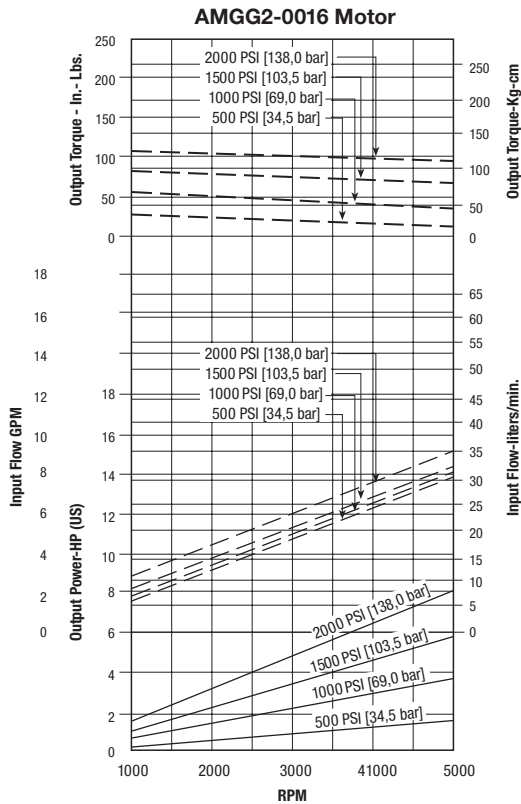
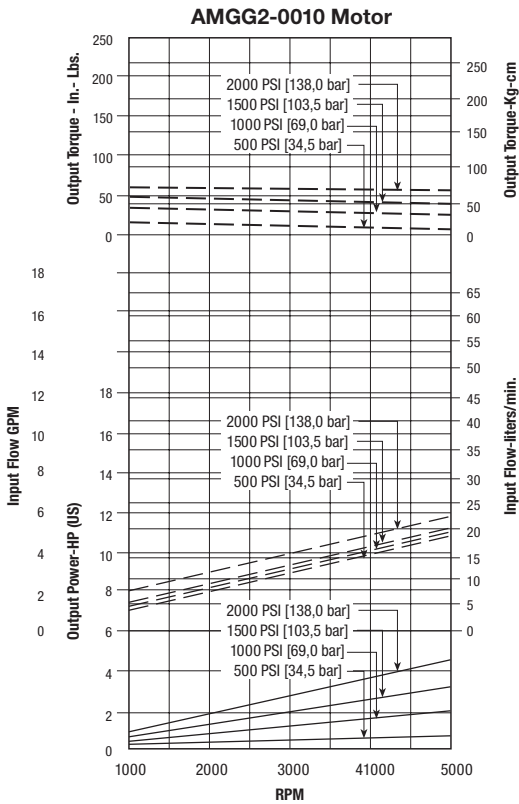
Model No.	P Straight Thread O-Ring Port Per SAE Spec. 514d
AMGG2-0010	SAE 8
AMGG2-0016	SAE 8
AMGG2-0020	SAE 8
AMGG2-0025	SAE 10
AMGG2-0030	SAE 10

Flange	W in (mm)
2-Bolt 'AA'	0.25 (6.3)
4-Bolt	0.25 (6.3)
2-Bolt 'A'	0.38 (9.5)

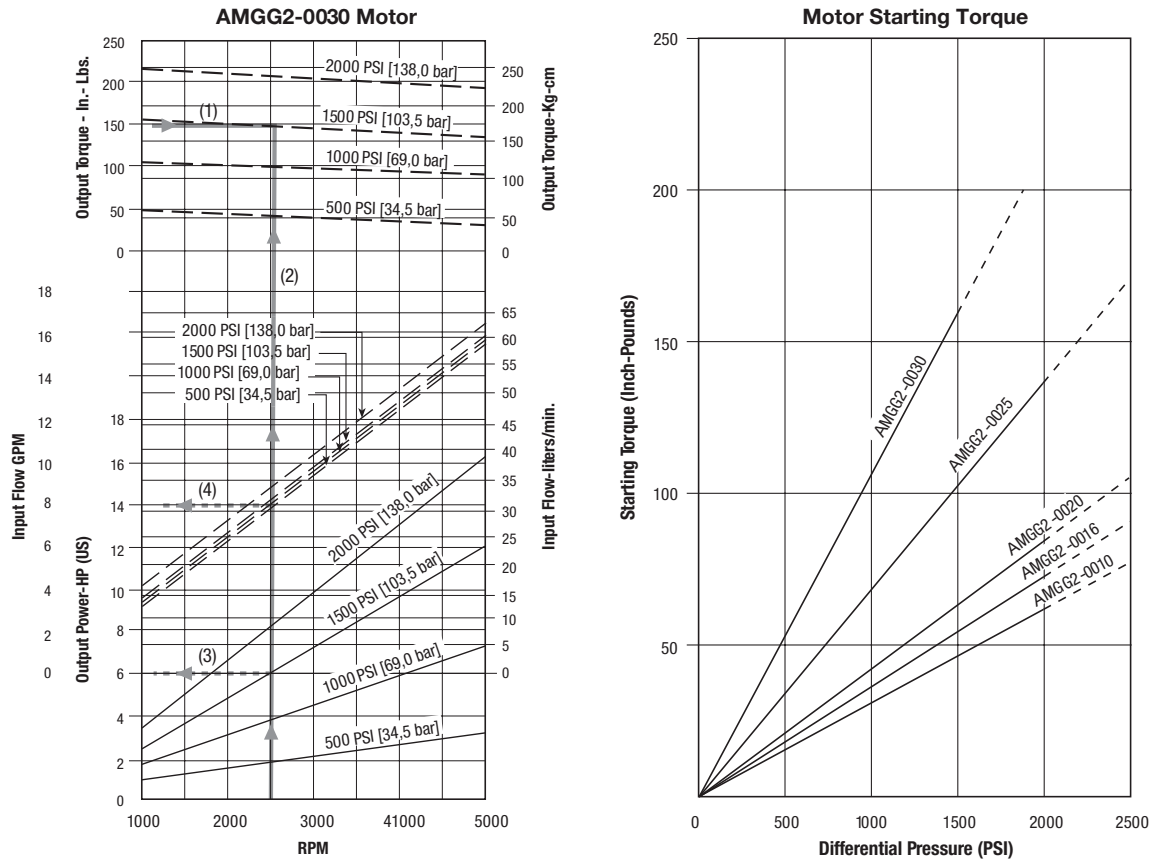
Cover Plates Available



TORQUE AND SPEED SELECTION CHARTS



TORQUE AND SPEED SELECTION CHARTS



MOTOR SELECTION

AMGG2 Hydraulic Motors are available in five basic models—each with its own input/output characteristics. To properly select a motor, two things must first be determined—the output torque (inch-pound) that the motor is to produce, and the speed requirement (RPM).

Example:

It is required that a motor will deliver an output torque of 150 inch-pounds at a speed of 2500 RPM.

To select the motor:

1. Draw a horizontal line (1) at 150 inch-pounds output torque. The AMGG2-0025 and AMGG2-0030 will both develop the required torque.
2. Draw a vertical line (2) up from 2500 RPM. The point of intersection of the 2 lines indicates the working pressure required at the motor to develop 150 inch-pounds at 2500 RPM.
3. The output horsepower is determined by drawing a horizontal line (3) from the intersection of 2500 RPM and the working pressure required at the bottom of the charts.
4. The input flow to the motor is determined by drawing a horizontal line (4) from the intersection of 2500 RPM and working pressure required in the middle of the chart.

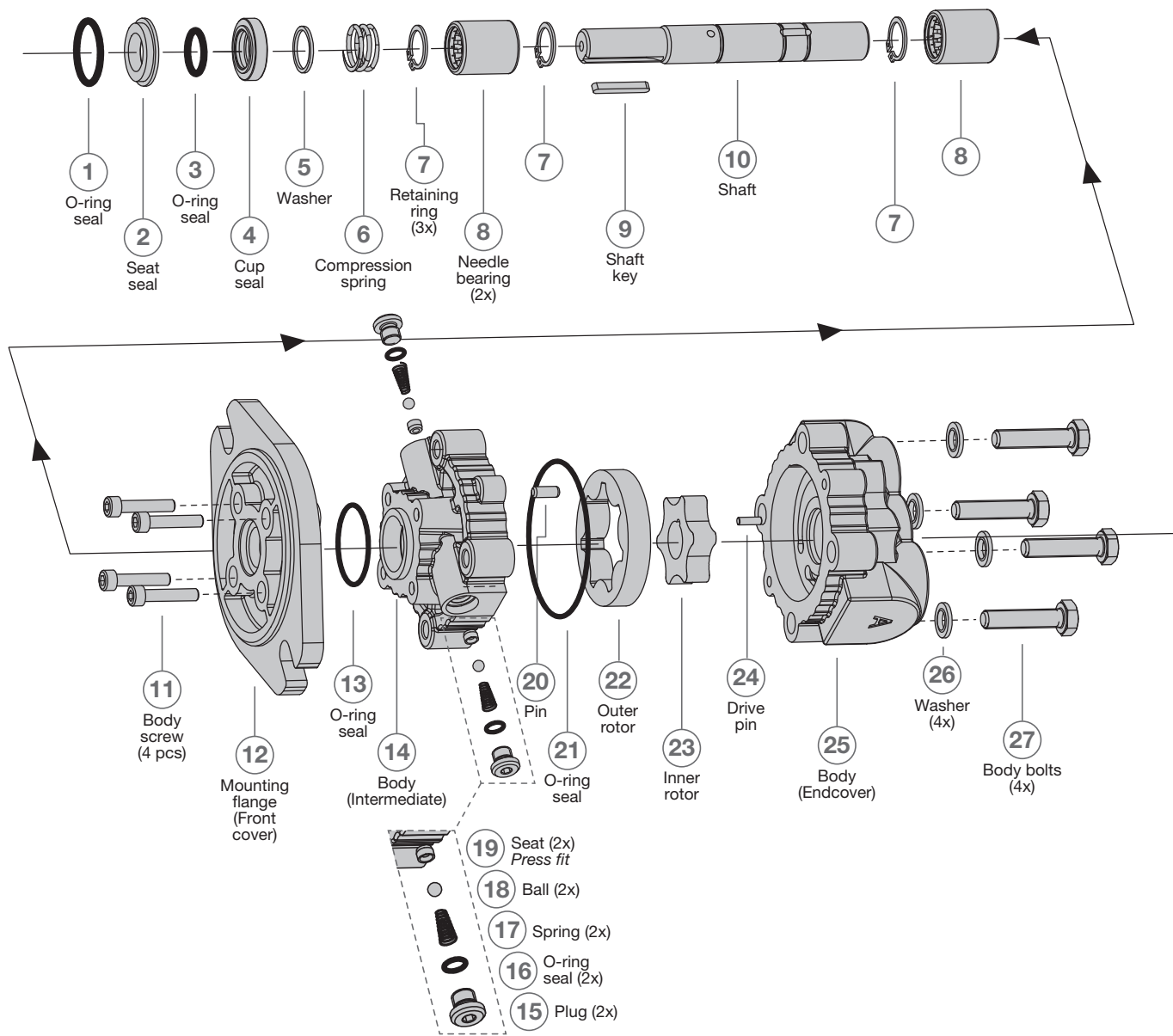
In this example, either the AMGG2-0025 or the AMGG2-0030 can be used.

The AMGG2-0025 will develop 150 inch-pounds of output torque at 2500 RPM with a pump output (motor input) of 7 GPM at 1800 PSI. The output horsepower is 6.

The AMGG2-0030 will develop 150 inch-pounds of output torque at 2500 RPM with a pump output (motor input) of 8 GPM at 1500 PSI. The output horsepower is 6.

ASSEMBLY DIAGRAM

When used in series, the back pressure shall not exceed 1000 psi (69 bar).



ASSEMBLY TORQUE VALUES

NOTES:

All torque values are based on a lubricated condition. If capscrews and/or nuts are dirty, they must be washed, blown dry, and re-oiled prior to installation. All studs must be washed and blown dry-DO NOT re-oil. The following torque values are to be used in the assembly of motors:

Series	Size	Torque (ft-lbs)
AMGG2 Body	5/16"	21-24
AMGG2 Flange	#10	46-54 (in-lbs)

Strength in Products, Strength in Service

- Pressure Switches
- Temperature Switches
- Differential Switches
- Level Switches
- Vacuum Switches
- Transducers
- Gear Pumps
- Vane Pumps
- Dump Pumps
- Variable Piston Pumps
- Orbital Motors
- Vane Motors
- Gear Motors
- Monoblock Valves
- High Pressure Ball Valves
- Flow Controls & Needle Valves
- Drive Couplings
- Flanges
- Gauges
- Test Points

ANFIELD Gerotor Motor Catalog AM/GG2 Rev. - (12-23-2025)



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